

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Original) A method of DC compensation for a direct conversion radio receiver, comprising the steps of:
  - determining the modulation extremes of a received modulated signal;
  - determining a DC offset for the signal from the modulation extremes; and
  - processing the signal to compensate for the offset.
2. (Original) A method according to claim 1, comprising determining the DC offset as substantially the mean of the signal amplitude at the modulation extremes.
3. (Original) A method according to claim 1, wherein the step of processing the signal comprises subtracting the offset from the signal.
4. (Original) A method according to claim 1, wherein the step of processing the signal comprises subtracting a weighted exponential function from the signal.
5. (Original) A method according to claim 4, wherein the weighting of the exponential function comprises the determined DC offset.
6. (Currently Amended) A method according to claim 1, wherein the receiver has an effective filter characteristic representing its frequency response, further comprising applying ~~the~~ an inverse filter characteristic to the signal.

7. (Original) A method according to claim 6, including determining the modulation extremes from the inverse filtered signal.

8. (Original) A method according to claim 1, wherein the signal comprises an in-phase component of a modulated signal.

9. (Original) A method according to claim 1, wherein the signal comprises a quadrature component Q of a modulated signal.

10. (Original) A method according to claim 1, wherein the signal is GMSK modulated.

11. (Original) A computer program which, when run on a processor, carries out the steps of claim 1.

12. (Original) A direct conversion receiver comprising:  
means for determining the modulation extremes of a received modulated signal;  
means for determining a DC offset for the signal from the modulation extremes;  
and  
means for processing the signal to compensate for the offset.

13. (Original) A receiver according to claim 12 having an effective filter characteristic representing its frequency response, further comprising inverse filter means to compensate for the filter characteristic.

14. (Currently Amended) A program to be executed by a digital signal processor in a direct conversion receiver, the receiver comprising a mixer circuit for providing quadrature related signals from a received modulated signal, a ~~de~~ DC cancellation circuit for canceling the ~~de~~ DC component in the quadrature related signals and a digital signal processor for removing a

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residual ~~de~~ DC component from the signals, said program being configured to cause the digital signal processor to determine the modulation extremes of the signals, to calculate a ~~de~~ DC offset for the signals from the modulation extremes and to process the signals to compensate for the ~~de~~ DC offset.